Caregivers' Perceptions of COVID-19 Educational Disruptions On Children With Developmental Language Disorder and Typically Developing Peers

Katherine Radville  
*MGH Institute of Health Professions*

Danika Pfeiffer  
*Old Dominion University, dlpfeiff@odu.edu*

KaRynn Sheranian  
*MGH Institute of Health Professions*

Julie Wolter  
*Gonzaga University*

Jessie Ricketts  
*Royal Holloway, University of London*

See next page for additional authors

Follow this and additional works at: https://digitalcommons.odu.edu/cdse_pubs  
Part of the Communication Sciences and Disorders Commons, Educational Assessment, Evaluation, and Research Commons, and the Emergency and Disaster Management Commons

**Original Publication Citation**  

This Article is brought to you for free and open access by the Communication Disorders & Special Education at ODU Digital Commons. It has been accepted for inclusion in Communication Disorders & Special Education Faculty Publications by an authorized administrator of ODU Digital Commons. For more information, please contact digitalcommons@odu.edu.
Caregivers’ Perceptions of COVID-19 Educational Disruptions on Children with Developmental Language Disorder and Typically Developing Peers

Katharine M. Radville, M.S., CCC-SLP\(^1\), Danika Pfeiffer, Ph.D., CCC-SLP\(^2\), KaRynn Sheranian, M.S., CCC-SLP\(^1\), Julie Wolter, PhD, CCC-SLP\(^3\), Jessie Ricketts, Ph.D.\(^4\), and Tiffany P. Hogan, Ph.D., CCC-SLP\(^1\)

\(^1\)Department of Communication Sciences and Disorders, MGH Institute of Health Professions
\(^2\)School of Communication Sciences & Disorders, Old Dominion University
\(^3\)School of Health Sciences, Gonzaga University
\(^4\)Department of Psychology, Royal Holloway University of London

Key Words
Developmental Language Disorder, COVID-19, Educational Disruptions, Caregivers, Oral Language, Literacy

Correspondences
Correspondence concerning this article should be addressed to Katharine Radville (kradville@mghihp.edu) and Tiffany Hogan (thogan@mghihp.edu), MGH Institute of Health Professions, 36 1st Avenue, Boston, MA 02129.
Abstract

Purpose: Understanding the experiences of families of children with developmental language disorder (DLD) during COVID-19 educational disruptions is essential for designing responsive supports during pandemic recovery efforts and beyond. This qualitative study describes the experiences of families of first- and second-grade children with DLD during the pandemic as compared to the experiences of families of typically developing (TD) peers.

Method: A conventional content analysis approach was used to analyze caregivers’ written responses to open-ended questions regarding their perceptions of COVID-19 educational disruptions. Responses were analyzed separately by group: caregivers of children with DLD ($n = 23$) and caregivers of TD children ($n = 22$).

Results: Four categories of caregiver responses were generated for each group: impacts on children, remote learning challenges, impacts on caregivers, and protective factors. For both groups, concerns about the child’s well-being and literacy learning were most prevalent, and more prevalent than concerns about oral language. Most caregivers in each group described negative impacts of educational disruptions on their child. As compared to caregivers of TD children, caregivers of children with DLD reported higher rates of remote learning challenges and more negative impacts on literacy learning, speech and/or language, and education in general. DLD caregivers also shared fewer positive comments and comments related to protective factors.

Conclusions: Results indicate that families of children with DLD may have experienced more challenges during COVID-19 educational disruptions as compared to families of TD peers. Ensuring that responsive supports and research target these families is essential.
DLD, CAREGIVERs, AND THE COVID-19 PANDEMIC

Caregivers’ Perceptions of COVID-19 Educational Disruptions on Children with Developmental Language Disorder and Typically Developing Peers

Beginning in February 2020, schools worldwide closed to mitigate the spread of COVID-19, impacting more than 1.3 billion students worldwide and 77 million in the United States by the end of the 2019-20 academic year (UNESCO, 2023). The onset of the pandemic caused disruptions for the vast majority of families and led to abrupt, unexpected changes to children’s instructional delivery. Formal education for nearly all children either took place remotely, did not take place at all, or was reduced during the second half of the 2019-20 school year. The subsequent 2020-21 school year was marked by either fully remote or hybrid learning for the vast majority of students. These rapid, unexpected changes disrupted typical routines with increased time spent at home (Lee et al., 2021) and a greater reliance on technology for learning and engagement with others.

COVID-19 Educational Disruptions: Impacts on Children

As pandemic recovery efforts continue, growing evidence elucidates significant, negative impacts on children. These include negative impacts on educational achievement in the United States (NAEP, 2022) in both math and reading (Kuhfeld et al., 2022; Kuhfeld & Lewis, 2022). Despite schools having been fully reopened for in-person learning for more than a full academic year for most children, reduced achievement has persisted (Lewis & Kuhfeld, 2023). Educational disruptions disproportionately negatively impacted children with pre-existing vulnerabilities such as low socioeconomic status, (Bailey et al., 2021), children in historically marginalized communities (Halloran et al., 2021), and children with intellectual/developmental disabilities (Northrup et al., 2023). Children with academic difficulties, such as in the area of reading, experienced more significant learning loss than their typically developing (TD) peers (Fuchs et
Further, the pandemic negatively impacted social-emotional well-being for many children, including heightened anxiety and depression (see Panchal et al., 2021 and Samji et al., 2021 for reviews). Children with academic difficulties, such as in the area of reading, experienced more significant learning loss than their TD peers (Fuchs et al., 2023). Further, the pandemic negatively impacted social-emotional well-being for many children, including heightened anxiety and depression (see Panchal et al., 2021 and Samji et al., 2021 for reviews).

**COVID-19 Educational Disruptions: Impacts on Caregivers**

In addition to negative impacts on children’s learning, the educational disruptions caused by the COVID-19 pandemic also had adverse effects on caregivers. This included mental health challenges (Babore et al., 2021; Patrick et al., 2020; Russell et al., 2020), loss of childcare (Patrick et al., 2020), the sudden need to balance work responsibilities with supporting their child’s learning (Canales-Romero & Hachfeld, 2022), and heightened concerns about their child’s mental health (Lee et al., 2020). In general, caregivers of school-aged children are thought to have been more impacted by pandemic-related disruptions as compared to the population in general (Thorn & Vincent-Lancrin, 2021). Limited but compelling evidence suggests that families of children with developmental delays and disabilities may have been particularly vulnerable to challenges associated with COVID-19 educational disruptions in terms of mental health and caregiving-related challenges (Dhiman et al., 2020; Meral, 2021; Northrup et al., 2023). One such group of families with potential for considerable vulnerability in the context of the pandemic are families of children with developmental language disorder (DLD).

**Developmental Language Disorder: Vulnerable Children and Families**

DLD is a common, neurobiological condition that occurs in approximately 10% of children (Norbury et al., 2016) and affects language understanding and/or use (McGregor et al.,
DLD, CAREGIVERS, AND THE COVID-19 PANDEMIC

2020). DLD is associated with academic challenges (see Ziegenfusz et al., 2022, for a review) and reduced social-emotional well-being (Conti-Ramsden & Botting, 2008). Academically, children with DLD have a heightened risk for literacy difficulty, including both poor comprehension (Catts et al., 2002) and/or comorbid dyslexia (Catts et al., 2005). Unsurprisingly, caregivers of children with DLD are also vulnerable to myriad challenges. This includes heightened stress (Bonifacci et al., 2016), stigmatization (Machery & von Suchodoletz, 2008), and difficulty understanding their child’s language difficulty (Ash et al., 2020; Porter et al., 2020). Further, many caregivers are not aware of their child’s language difficulty (Chan et al., 2022; Hendricks et al., 2019), and many become aware of the difficulty only when academic and related linguistic demands increase in upper elementary school. This is unsurprising, as DLD is pervasively under-identified with only approximately 20% identified for school supports in the early grades (Hendricks et al., 2019; Tomblin et al., 1997). Even during typical circumstances (e.g., prior to the COVID-19 pandemic), improved understanding of the specific needs of caregivers of children with DLD was needed to inform policy and practice (Lindsay et al., 2016). In sum, children with DLD and their families experience myriad challenges, situating them at a higher risk for negative impacts of pandemic-era disruptions.

Despite well-documented academic and psychosocial challenges for families in general, little is known about the impacts of the COVID-19 pandemic on families of children with DLD. Radville et al. (2023) revealed multiple areas of potential vulnerability for families of children with DLD during school closures. These included less robust home literacy engagement for families of children with both DLD and word reading difficulty and lower levels of engagement in literacy learning when the caregiver had their own history of language or literacy difficulty. Thus, the most vulnerable families engaged in fewer routines that had the potential to mitigate
the detrimental effects of disruptions on language and literacy. These concerning results elucidate the need for further exploration of the experiences of families of children with DLD during COVID-19 educational disruptions. This information is needed to inform responsive supports and education policies as pandemic recovery continues. It is also necessary to inform the response of the education system to future pandemics.

DLD Longitudinal Study

The current study focused on a subset of caregivers who were enrolled in a larger, longitudinal study of word learning in children with DLD. The larger study aims to examine predictors of word learning and word reading in children with DLD over time. To that end, children with DLD and TD peers are enrolled in the study in kindergarten through second grade. During each study year, children participate in normed measures of language and literacy as well as experimental measures assessing word learning under multiple conditions. Study procedures also include yearly collection of family and household contextual information through caregiver responses to an annual survey.

Purpose

The purpose of the current qualitative study was to examine open-ended responses from questionnaire data gathered from caregivers of children with DLD and TD children in the longitudinal study to assess their perceptions of COVID-19 educational disruptions. We sought to address two research questions:

RQ1: What were caregivers of children with DLD and of TD children’s perceptions of the impacts of COVID-19 educational disruptions?

RQ2: How do the perceptions of caregivers of children with DLD compare to those of TD children?
Method

Design

In this section, we provide a brief overview of the larger longitudinal study followed by a description of the caregivers who completed the questionnaire analyzed for the current study and an explanation of our qualitative methodology. The Standards for Reporting Qualitative Research (SRQR) (O’Brien et al., 2014) were used to guide the development of this manuscript.

The Longitudinal Study

Children in the larger, longitudinal study were recruited from urban school districts in the northwestern and northeastern United States. We established screening procedures to systematically over-sample children with language difficulty (Komesidou et al., 2022). Each child was monolingual, recruited during kindergarten, and did not have any diagnoses associated with cognitive difficulty. The Massachusetts General Brigham and University of Montana Institutional Review Boards (IRBs) approved all study procedures. Families signed IRB-approved consent forms to participate. All children participated in standardized assessments of oral language, word reading, and nonverbal intelligence to determine study eligibility and group assignment. These assessments took place at the time of study enrollment. For second grade children, the assessments took place in-person, shortly before the onset of the COVID-19 pandemic (January and February of 2020). For first grade children, the assessments were conducted via Zoom due to school closures. Trained research assistants, including speech-language pathology graduate students and doctoral students, administered and scored the assessments. Table 2 displays means, standard deviations, and statistical significance for language, nonverbal intelligence, and word reading by group.

Participants
All caregivers of children who were currently enrolled in the larger, longitudinal study were invited to complete the Caregiver Questionnaire (described in detail below). At the time of this smaller study, that included 118 caregivers, 61 (51.69%) of whom had a child assigned to the DLD group and 57 (48.31%) of whom had a child assigned to the TD group. Dissemination of an annual Caregiver Questionnaire to each enrolled participant’s family was part of routine study procedures that were approved by the IRB at the outset of the study. Thus, caregivers did not need to complete an additional consent form to complete the Caregiver Questionnaire examined in this qualitative study. The questionnaire was distributed in October of 2021, shortly after full, in-person learning had resumed for each school at which study participants were enrolled at the time of recruitment. A total of 45 caregivers responded (36.59% response rate) to the questionnaire: 35 responded electronically using REDCap electronic data capture tools (Harris et al., 2009) hosted by Mass General Brigham, seven completed the questionnaire via a mailed paper form, and three completed it via a telephone conversation with a researcher. Each participant received an initial, electronic invitation to complete the questionnaire and three email reminders if needed. Paper copies were mailed to families without access to email or valid email addresses and to families who did not respond to any email invitations to complete the questionnaire. Three caregivers requested to complete the survey via telephone. For those participants, the researchers did not ask follow-up or clarification questions and recorded responses verbatim such as to avoid inconsistencies between data collection modalities. Responses were received between 10/22/2021 and 1/15/22.

Of the 45 caregivers who responded to the questionnaire, 23 had a child who was assigned to the DLD group and 22 had a child who was considered a TD peer for the purposes of the larger study. The DLD group included six girls (26.09%) and 17 boys (73.91%) and the TD
DLD, CAREGIVERS, AND THE COVID-19 PANDEMIC

group included 12 girls (54.55%) and 10 boys (45.45%). Mean age was 7.35 years ($SD = 0.50$) for the DLD group and 7.24 years ($SD = 0.54$) for the TD group. Nine children (39.13%) in the DLD group were in first grade at the time of this study, and 14 (60.87%) were in second grade. Nine children in the TD group were in first grade (40.91%), and 13 were in second grade (59.09%). Caregivers included primarily mothers (32, 71.11%), six fathers (13.33%), two foster parents (4.44%), three grandmothers (6.67%) and two primary caregivers (4.44%) who did not share their relationship to the child. Additional educational and demographic information is reported in Table 1.

The Caregiver Questionnaire
The Caregiver Questionnaire was designed to be distributed either electronically via REDCap or by mail to families of all enrolled participants during each year of the larger, longitudinal study. During each year of the larger study, the Caregiver Questionnaire included questions pertaining to demographic information (five questions), home literacy practices (27 questions), the household environment (15 questions), other household routines (18 questions), and the child’s developmental and family history (15 questions). For the current study, the first author (speech-language pathologist, literacy specialist, and doctoral candidate) and senior author (project principal investigator and speech-language pathology faculty member) added seven open-ended questions to the questionnaire for qualitative analysis focused on caregivers’ perceptions of the COVID-19 pandemic on their child, with a focus on language and literacy learning. Readability was considered to maximize accessibility to the participants (Dillman et al., 2014). Key terminology was briefly defined within the questions using accessible vocabulary. The open-ended questions are provided in Table 2.

Data Analysis
The researchers used the conventional content analysis approach (Hsieh & Shannon, 2005) to analyze responses to the seven open-ended questions on the Caregiver Questionnaire. This allowed for examination of caregivers’ experiences without prescribing assumptions or preconceived conclusions onto responses. While information could be gathered using quantitative measures such as rating scales, it is unlikely that existing measures would adequately describe caregivers’ experiences during the highly unusual circumstances of the pandemic. As such, our methods allowed for caregivers’ exact words to drive our analysis. The first and third authors (both doctoral researchers and speech-language pathologists) engaged in emergent consensus coding (Creswell & Clark, 2017) using NVivo 12 software (Lumivero, 2017). The coding included two, licensed speech-language pathologists with extensive experience (15 years and eight years) working with children with language disorders and their families. Positionality statements for each coder are included in the Appendix.

The following steps of the conventional content analysis approach (Hsieh & Shannon, 2005) were completed separately by group to analyze caregiver responses and to allow for between-group comparisons (see Figure 1). We coded DLD caregivers’ responses first, followed by TD caregivers’ responses. During initial coding, the coders participated in repeated readings of each caregiver's response independently and identified key words and phrases related to the research questions to generate initial codes (Figure 1, Step 1). Then, the coders met to establish consensus on their initial codes based on caregivers’ exact words in each response, applying multiple codes as appropriate (Figure 1, Step 2). Coders then created a codebook consisting of their consensus codes and definitions. Next, coders engaged in axial coding (the process where data are sorted, synthesized, and organized) to refine, collapse, and consolidate consensus codes.
and their definitions into subcategories (Charmaz, 2014) (Figure 1, Step 3). Lastly, subcategories of codes were collapsed into categories (Figure 1, Step 4).

Multiple methods were used to establish credibility and increase the trustworthiness, persuasiveness, and relevance of the findings. The credibility of the categories was assessed through a peer debriefing process with a researcher with extensive experience in qualitative analysis and working with children and families (the second author). Additional methods used to support the trustworthiness and persuasiveness of the analysis included: the use of multiple coders, rich descriptions providing contextual information, detailed report of the research method, presenting disconfirming evidence in the data (i.e., information that challenges our analysis; noted below in Category 2 in caregivers’ positive comments about remote learning), use of an audit trail, and utilizing NVivo 12 computer software (Lumivero, 2017) during analysis (Johnson et al., 2020).

**Results**

A total of 13 subcategories were generated during the analysis process. Those subcategories were combined and condensed into four overall categories. The subcategories and categories were all present in both groups’ response. Categories are described below in order of frequency of caregiver report (most to least frequent) across caregiver groups combined. The categories and subcategories are presented in Table 3 and each group’s subcategory frequencies (in percentages) are presented in Figure 2. Exemplar quotes illustrating responses from each group for each category were chosen by both coders and systematically selected from a range of participants to amplify a variety of caregiver voices and reflect a diversity of caregiver experiences. For the purposes of succinctly reporting these findings, we refer to caregivers of
children in the DLD group as ‘DLD caregivers’ and to caregivers of TD peers as ‘TD caregivers.’

Category 1-Impacts on Children: 96.36% of Caregivers

This first category captured caregivers’ perceptions of the impacts of COVID-19 educational disruptions on their child. Caregivers’ responses in both groups included the same seven subcategories: a) *child language not affected*, b) *child literacy not affected*, c) *negative impact on child well-being*, d) *negative impact on literacy*, e) *negative impact on speech or language*, f) *negative impact on education*, and g) *positive impact on the child*. Table 4 presents counts, percentages, and example quotes for each subcategory within the impacts on children category. Overall, more DLD caregivers described negative impacts on literacy (69.57% as compared to 40.91% of TD caregivers), speech and/or language (30.43% as compared to 4.55% of TD caregivers), and on the child’s education in general (34.78% as compared to 18.18% of TD caregivers). This category included both positive and negative impacts as well as direct statements of a lack of impact on language, literacy, and/or the child’s education more broadly.

A majority of DLD caregivers (86.96%) reported at least one negative impact on the child. Only one DLD caregiver (4.35%) reported neither positive nor negative impacts on the child, and only three (13.04%) reported a positive impact on the child. Similarly, a majority of TD caregivers (77.27%) reported at least one negative impact on the child, but more (27.27%) reported no impacts or only positive impacts on the child as compared to DLD caregivers. Less DLD caregivers directly reported that their child’s language and literacy skills were not affected (43.38% DLD caregivers, 63.64% TD caregivers; 8.70% DLD caregivers, 40.91% TD caregivers, respectively). Fewer DLD caregivers (56.52%) as compared to 68.18% of TD caregivers shared concerns regarding negative impacts on the child’s well-being. Lastly,
approximately half as many DLD caregivers (13.04%) as TD caregivers (22.73%) reported positive effects of educational disruptions on their child.

Category 2 - Remote Learning Challenges: 70.91% of Caregivers

The second category captured caregivers’ descriptions of challenges associated with remote learning, either related to the child or the caregiver. Caregivers’ responses in both groups mentioned the same two subcategories: a) remote learning challenges, children and b) remote learning challenges, caregivers. A majority of caregivers in each group (74.13% of DLD caregivers and 54.55% of TD caregivers) described remote learning challenges.

Remote Learning Challenges, Children

Remote learning challenges related to the child were more prevalent for DLD caregivers (78.26%) as compared to the TD caregivers (36.36%). For both groups, this subcategory included multiple reports of children's dislike of remote learning. For example, Participant 22 DLD shared that their child “did not like remote learning and refused to participate”, and Participant 9 TD reported their child “did not learn much during remote learning. She did not like Zoom calls.” Caregivers in both groups also shared specific challenges their children faced when learning from home. For example, Participant 12 DLD reported, “The sounds on the computer were hard to hear. It was hard to see what the teacher was writing. Too much feedback,” and Participant 8 TD reported, “Remote learning and frequent absences due to quarantine orders have led to a lack of consistency in my child's learning experience.” DLD caregivers also described general dissatisfaction with remote learning and a strong preference for in-person education. Participant 9 DLD reported, “[My child] definitely benefits from a structured environment like school where they have a daily routine. During the pandemic and remote learning process, she seemed lost without all of that.” Participant 16 DLD reported,
Remote learning made the idea of school a challenge. [My child] thrives in an in-person environment.”

**Remote Learning Challenges, Caregivers**

Caregivers in both groups reported their own remote learning challenges at similar rates: 30.43% of DLD caregivers and 27.27% of TD caregivers. Several caregivers in each group described challenges related to supporting their child. This included structural challenges such as time constraints and competing household demands. For example, Participant 15 DLD reported, “I had difficulties working at home while also caring for my 2-year-old and also making sure [she] was engaged in remote learning and often helping her complete school work. It took its toll on all of us.” Similarly, Participant 4 TD described, “Having to help with [my child’s] online learning was difficult, feeling the pressure of making sure she was learning was hard.” Two TD caregivers additionally described concerns regarding their lack of adequate knowledge to support learning: “I had a hard time because I wasn't sure where she should be academically so I didn't know if I was pushing too hard or not enough” (Participant 20 TD) and “I’m not a teacher. I’m a parent, I have great respect for teachers” (Participant 21 TD). No DLD caregivers shared positive comments related to remote learning. However, two caregivers of TD peers shared positive impressions of remote learning: “She did very well with the online academy” (Participant 4 TD) and “My child did really well during remote learning. No concerns [about] her” (Participant 16 TD).

**Category 3-Impacts on Caregivers: 40.00% of Caregivers**

The third category captured caregivers’ perceptions of the impacts of COVID-19 educational disruptions on themselves. For both groups, the *impacts on caregivers* category encompassed two subcategories: a) *caregiver learning* and b) *negative impact on caregiver well-
being. This category captured the responses of 39.13% of DLD caregivers and 59.09% of TD caregivers.

**Caregiver Learning**

A total of 26.09% of DLD caregivers described learning something about their child’s skills, educational needs, or instruction during the COVID-19 pandemic as compared to 50% of TD caregivers. Two DLD caregivers reported learning about supports that their child was receiving. For example, Participant 7 DLD shared that, “Having him at home helped us understand the Wilson [Reading System] approach and was able to reinforce the same language the teachers used” and Participant 2 DLD reported having “more intimate knowledge of what is expected by the SLP teacher.” Both DLD and TD caregivers shared examples of learning about areas in which their child was having difficulty. For example, Participant 17 DLD reported that, “I can see where he has more issues with some sounds he can’t say” and Participant 15 DLD described being “more familiar with her struggles in writing.” Participant 14 TD described learning that their child “doesn’t like using sounds to figure out words” and Participant 10 TD shared that they learned about their child’s “difficulty remembering to wait until someone is finished speaking before he says something.” Unlike the DLD caregivers, eight TD caregivers shared directly positive experiences related to learning about their child. For example, Participant 17 TD shared, “I have been able to be more a part of getting to know my child. We, together, look and learn and discover new books.” Similarly, Participant 6 TD explained, “Remote lessons gave us a more active role and better opportunity to observe his development than we might have had otherwise. It has been fun to watch him progress to reading full chapter books on his own.”

**Negative Impact on Caregiver Well-Being**
DLD caregivers reported similar rates of negative impacts on their own well-being (17.39%) as compared to TD caregivers (18.18%). For both groups, this included descriptions of heightened stress and mental health challenges. For example, Participant 13 DLD shared “All of it was stressful” and Participant 9 DLD described, “It was challenging to have to stay away from people and family. I also suffered some depression throughout the pandemic, even more so seeing my daughter struggle and not being able to do anything about it.” Participant 10 TD reported, “Both parents had additional stresses during the pandemic due to increased workload, staffing shortages, quarantining, remote work.” Participant 6 TD echoed reports of increased stress, stating, “Cabin fever and ongoing general, societal stress have been unavoidable.”

Category 4-Protective Factors: 33.33% of Caregivers

The last category captured caregivers’ descriptions of structures or supports that they perceived as helpful in mitigating the negative impacts of educational disruptions on the child. For both groups, it encompassed two subcategories: a) environment level protective factors (familial, community, or school-based supports that mitigated negative impacts) and b) child level protective factors (a child’s characteristics or behaviors that supported their success during disruptions, or descriptions of child resilience during challenging circumstances). This category captured the responses of 17.39% of DLD caregivers and 50.00% of TD caregivers.

Environmental Level Protective Factors

Descriptions of environment level protective factors were less frequent for DLD caregivers (17.39%) as compared to TD caregivers (40.91%). Participant 7 DLD described familial factors that supported the child, “We were able to help more and be more attentive to his needs at home” and Participant 6 TD described both familial and school-based protective factors:
“The experience has been atypical, since he has never had a ‘regular’ school year, but his education is progressing well thanks to creative teachers and our parental involvement.”

**Child Level Protective Factors**

DLD caregivers also shared fewer comments related to the child level protective factors, (13.04%) as compared to TD caregivers (36.36%). Caregivers in the DLD group who reported child level protective factors shared this information in the context of the child struggling during remote learning, but demonstrating improvements once back in school. For example, Participant 9 DLD explained that, “My daughter could not read much while experiencing remote learning. Now that she is back in school, she is actually reading not just sight words but other words I didn’t think she could read.” Similarly, Participant 12 DLD shared that “[His] speech has improved since being back in the school building.” However, TD caregivers who described child level protective factors referred to specific strengths. This included academic strengths or aspects of the child’s personality, that the caregiver referred to as mitigating negative aspects of disruptions or being helpful during disruptions. For example, Participant 22 TD shared, “Surprisingly he has been able to thrive still. He is a great reader and very smart” and Participant 6 TD reported, “He has an understanding of the situation and has adapted well.”

**Discussion**

This study describes caregivers’ perceptions of COVID-19 educational disruptions for children with DLD and their TD peers. Four categories were generated from caregivers’ responses using a conventional content analysis approach: impacts on children, remote learning challenges, impacts on caregivers, and protective factors. Caregivers of children with DLD highlighted several areas of vulnerability for their families including high rates of remote learning challenges and negative impacts on their children’s literacy, speech and/or language,
and education in general. DLD caregivers reported fewer protective factors, both at the environment and child levels. Overall, caregivers in each group expressed more concerns about their child’s literacy skills and well-being as compared to their oral language skills.

Vulnerabilities Associated with DLD and Educational Disruptions

DLD caregiver responses highlighted several areas of vulnerability. This included higher rates of remote learning challenges for children as compared to TD caregivers, few concerns related to oral language, and fewer comments related to child resilience and protective factors as compared to TD caregivers. High rates of child difficulty with remote learning for children with DLD are not surprising in light of disproportionate impacts of disruptions on children with learning disabilities (Fuchs et al., 2023) and intellectual/developmental disabilities (Northrup et al., 2023). Both literacy (Catts et al., 2002; Catts et al., 2006) and general academic difficulty (Ziegenfusz et al., 2022) likely exacerbated challenges associated with this novel, largely unfamiliar modality for schooling. Concerns regarding literacy were more prevalent amongst DLD caregivers. The higher prevalence of literacy concerns in responses of DLD caregivers was expected, given that children with DLD are at heightened risk for literacy difficulty (Catts et al., 2002; Catts et al., 2006).

Compared to TD caregivers, DLD caregivers reported lower rates of environment level protective factors and child-level, protective factors. Taken together, these findings indicate that families of children with DLD may have experienced more challenges during educational disruptions despite being faced with generally similar circumstances (e.g., comparable durations for school closures and remote learning). Alternatively, families of TD children may have had similarly challenging experiences but were more able to compensate due to a lower preponderance of education-related difficulties. This is unsurprising given that numerous
DLD, CAREGIVERS, AND THE COVID-19 PANDEMIC

challenges are associated with raising a child with DLD: reduced social-emotional well-being (Bonifacci et al., 2016), stigma (Machery & von Suchodoletz, 2008), and difficulty understand the child’s language difficulty and diagnosis (Ash et al., 2020). Further, children with DLD experiences many challenges associated with schooling (Catts et al., 2002; Catts et al., 2006; Ziegenfusz et al., 2022). Further, it aligns with the available evidence related to disproportionate impacts of educational disruptions on families of young children in general (Thorn, W. & Vincent-Lancrin, S., 2021) and more specifically, on children with developmental delays and disabilities (Dhiman et al., 2020; Meral, 2021; Northrup et al. 2023).

Shared Experiences Across Groups

Concerns About Social-Emotional Well-Being and Literacy

We defined shared experiences as subcategories reported by both DLD and TD caregivers. Caregivers of children in both groups reported all but one of the same 13 subcategories. The majority of caregivers, regardless of group, described negative impacts of educational disruptions on their child. For both groups, child well-being and literacy learning were the most prevalent areas of concern. Concerns regarding child well-being align with mounting evidence that educational disruptions negatively impacted child social-emotional well-being (Panchal et al., 2021; Samji et al., 2021). Likewise, concerns about literacy learning were expected given that the children in this study were at critical grades for literacy learning during the most disrupted academic years. Difficulty with early literacy skills, such as decoding short words, may have been relatively easy for caregivers to observe during remote learning. Further, high levels of awareness of literacy in general may be expected due to increased advocacy, media coverage, and public interest related to reading in recent years (Goldberg et al., 2023; Goldstein, 2022). Taken together, these findings suggest that caregivers of young children may
be most interested in and, in-turn, potentially most likely to seek out supports related to children’s social-emotional well-being and literacy learning as pandemic recovery efforts continue.

Caregivers in both groups also described negative impacts on their own well-being. This is consistent with prior findings associating increased mental health challenges with caregiving during the pandemic (Babore et al., 2021; Patrick et al., 2020; Russell et al., 2020). Also consistent with prior findings, caregivers in this study experienced challenges supporting the child’s education and balancing competing responsibilities while at home (Canales-Romero & Hachfeld, 2022). Taken together, this provides impetus for considering both child and caregiver social-emotional well-being in the design of responsive supports as COVID-19 recovery efforts continues.

**Few Concerns About Oral Language**

Few caregivers expressed concerns about oral language, regardless of group. Many DLD caregivers were likely unaware of their child’s language difficulty, consistent with prior findings (Chan et al., 2022; Hendricks et al., 2019). This could be the case for several reasons. Only approximately half of the children in the DLD group were receiving special education services at the time of this study. Thus, it is unlikely that many of children in the DLD group had been identified by their schools as having difficulty with oral language. This would be consistent with pervasively low identification rates for DLD (Hendricks et al., 2019; Tomblin et al., 1997). Further, children were recruited for the larger study through use of a screening measure in their schools, not because they had been identified by a caregiver as having language difficulty. Further, oral language difficulty is often less easily observable as compared to other difficulties (such as difficulty with early reading skills). Lastly, even if caregivers were aware of their
child’s language difficulties, they may not have understood the nature of the child’s disorder
(Ash et al., 2020) or had enough specific, related knowledge or familiarity with related
terminology to comment. This highlights both the need for ongoing efforts to raise awareness of
DLD, as well as the need for universal, school-based screening efforts for identifying children
with language difficulty.

Implications

Consistent with previous findings (Canales-Romero & Hachfeld, 2022; Patrick et al.,
2020; Thorn & Vincent-Lancrin, 2021), the current study suggests that educational disruptions
were challenging for caregivers of young children, regardless of the presence of language
difficulty. In this study, we documented notable concern regarding child social-emotional well-
being, which was not surprising in light of prior findings regarding heightened anxiety and
depression in children during the COVID-19 pandemic (Panchal et al., 2021; Samji et al., 2021).
We also documented high levels of concern regarding literacy learning. Again, these concerns
align with what is known regarding the impacts of the pandemic on reading achievement in the
United States. Reading proficiency was significantly, negatively impacted (NAEP, 2022;
Kuhfeld & Lewis, 2022) and those impacts persist, even as schools continue to be fully opened
for in-person learning (Kuhfeld et al., 2022). These findings highlight the need to consider both
academic and social-emotional needs during ongoing pandemic recovery efforts.

The current study elucidates areas of potential vulnerability for families of children with
DLD during the COVID-19 pandemic: supporting children’s academic performance, particularly
literacy learning, providing social-emotional support, and increasing caregivers’ awareness of
children’s oral language challenges. This provides strong impetus for increased efforts towards
supporting families of children with DLD during pandemic recovery efforts and beyond. Despite
reporting a high level of other concerns, few DLD caregivers reported concerns regarding oral language. On the one hand, caregivers may have been aware of their child’s difficulty but not concerned. Or, they may not have felt that disruptions impacted language learning. Alternatively, and more consistent with prior studies (Chan et al., 2022; Hendricks et al., 2019), caregivers may not have been aware of their child’s difficulties. This highlights a critical need for improved dissemination of information about DLD, not only to caregivers but also to educators and policy makers. Improving early screening efforts and identification rates and parental education will be critical for improving supports for both families and children and, in-turn, improving functional outcomes.

Limitations and Future Directions

Data were collected using open-ended questions, largely via written responses. Providing written responses could be challenging for some caregivers and may have yielded a lower volume of information per participant as compared to other data collection methods such as interviews. Because DLD is a hereditable condition (Barry et al., 2006), caregivers of children with DLD may have had similar challenges, including with writing. We also did not request a specific length of caregivers’ responses which yielded responses of varying lengths and levels of detail. It is possible that some caregivers had additional experiences but did not report them in their responses. However, using a written response approach had clear benefits in that it allowed us to gather information from caregivers whose children were enrolled in a larger study and therefore had other detailed demographic and assessment data. It also allowed for a feasible approach to data collection during pandemic era disruptions and related challenges. Additionally, this study included a small number of caregivers of young (early-elementary) children.
Therefore, we cannot extend conclusions to families of older children. This would be a useful area of focus for future, similar studies.

Despite limitations, this study has notable strengths. First, this study fills a gap in the literature by documenting the experiences of families of children with DLD during COVID-19 educational disruptions. Our use of an inductive approach to content analysis allowed us to authentically capture and share the lived experiences of a vulnerable population of families. Further, by including both families of children with and without DLD, we could make direct comparisons, providing detailed information about the similarities and differences in families’ lived experiences, as described in their own words. Additionally, we took several provisions to maximize credibility and trustworthiness of our qualitative analysis process. This included the use of two, independent coders, peer debriefing, a detailed audit trail, and NVivo 12 Qualitative Analysis Software (Lumivero, 2017).

In this study, we describe caregiver perceptions and general differences between groups using qualitative methods. A mixed methods study with a larger sample of caregivers of children with DLD is a clear direction for extension of this work. This should include understanding of the experiences of caregivers with DLD, including awareness of language difficulty and learning needs. Work is needed to increase awareness of DLD, including effective methods for educating caregivers. Additionally, similar studies may examine caregiver perceptions of language and literacy learning beyond the context of the COVID-19 pandemic. This will inform clinical practice as well as help tailor supports that consider both the children’s and families’ needs.

**Conclusion**

In summary, concerns regarding social-emotional well-being and literacy learning were common amongst caregivers in both groups. DLD caregivers reported higher rates of concern in
nearly all areas, but reported protective factors at lower rates. These findings indicate that families of children with DLD may have been particularly vulnerable to the impacts of educational disruptions. This work has key implications for supporting families of children with DLD, including designing responsive supports during ongoing pandemic recovery, increasing awareness of DLD, and continuing to focus research efforts on families of children with DLD.

Acknowledgments

Research reported in this publication was supported by the National Institute on Deafness and Other Communication Disorders of the National Institutes of Health (R01 DC016895; Co-PIs: Hogan and Wolter). The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health. Finally, we are grateful for each caregiver who supported this study by sharing their experiences.

Declaration of Interest Statement

The authors report that there are no competing interests to declare.

Data Availability Statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.
DLD, CAREGIVERS, AND THE COVID-19 PANDEMIC

References


DLD, CAREGIVERS, AND THE COVID-19 PANDEMIC


DLD, CAREGIVERS, AND THE COVID-19 PANDEMIC


DLD, CAREGIVERS, AND THE COVID-19 PANDEMIC


DLD, CAREGIVERS, AND THE COVID-19 PANDEMIC


DLD, CAREGIVERS, AND THE COVID-19 PANDEMIC


DLD, CAREGIVERS, AND THE COVID-19 PANDEMIC


10.1111/camh.12501


Table 1
Educational and demographic information by group.

<table>
<thead>
<tr>
<th></th>
<th>DLD, ( n = 23 )</th>
<th>TD, ( n = 22 )</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( n )</td>
<td>%</td>
</tr>
<tr>
<td><strong>School Modality, 2020-2021 Academic Year</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remote, Full Year</td>
<td>5</td>
<td>21.74%</td>
</tr>
<tr>
<td>Hybrid, Full Year</td>
<td>5</td>
<td>21.74%</td>
</tr>
<tr>
<td>Remote or Hybrid Until Spring Reopening</td>
<td>9</td>
<td>39.13%</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>17.39%</td>
</tr>
<tr>
<td><strong>Special Education Services</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Received Services, 2020-21 Academic Year</td>
<td>13</td>
<td>56.52%</td>
</tr>
<tr>
<td>Received Services, 2021-22 Academic Year</td>
<td>12</td>
<td>52.17%</td>
</tr>
<tr>
<td><strong>Child Race</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Indian/ Alaska Native</td>
<td>1</td>
<td>4.35%</td>
</tr>
<tr>
<td>Asian</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Black/African American</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Native Hawaiian/ Pacific Islander</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>White</td>
<td>16</td>
<td>69.57%</td>
</tr>
<tr>
<td>Mixed</td>
<td>3</td>
<td>13.04%</td>
</tr>
<tr>
<td>Not Reported</td>
<td>1</td>
<td>4.35%</td>
</tr>
<tr>
<td><strong>Child Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>7</td>
<td>30.43%</td>
</tr>
<tr>
<td>Not Hispanic/Latino</td>
<td>15</td>
<td>65.22%</td>
</tr>
<tr>
<td>Not Reported</td>
<td>1</td>
<td>4.35%</td>
</tr>
<tr>
<td><strong>Geographic Location</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Massachusetts</td>
<td>18</td>
<td>78.26%</td>
</tr>
<tr>
<td>Montana</td>
<td>5</td>
<td>21.74%</td>
</tr>
<tr>
<td><strong>Household Income</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than $20,000</td>
<td>3</td>
<td>13.04%</td>
</tr>
<tr>
<td>$20,000 - $44,999</td>
<td>9</td>
<td>39.13%</td>
</tr>
<tr>
<td>$45,000 - $139,999</td>
<td>8</td>
<td>34.78%</td>
</tr>
<tr>
<td>$140,000 - $149,999</td>
<td>1</td>
<td>4.35%</td>
</tr>
<tr>
<td>$150,000 - $199,999</td>
<td>1</td>
<td>4.35%</td>
</tr>
<tr>
<td>$200,000+</td>
<td>1</td>
<td>4.35%</td>
</tr>
<tr>
<td><strong>Primary Caregiver Education Level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than high school</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>High School Diploma or GED</td>
<td>3</td>
<td>13.04%</td>
</tr>
<tr>
<td>Some College</td>
<td>5</td>
<td>21.74%</td>
</tr>
<tr>
<td>Associate’s Degree/ Technical Certificate</td>
<td>2</td>
<td>8.70%</td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td>11</td>
<td>47.83%</td>
</tr>
<tr>
<td>Master’s Degree or Higher</td>
<td>2</td>
<td>8.70%</td>
</tr>
</tbody>
</table>
Table 2

Open-ended questions.

1. How has the Covid-19 pandemic affected your child's education?

2. How has the Covid-19 pandemic affected your child's language development? Language includes communication skills, speaking, learning new words, following spoken directions, and understanding spoken information.

3. How has the Covid-19 pandemic affected your child's literacy development? Literacy includes learning letter names and sounds, reading, spelling, and writing.

4. How has the Covid-19 pandemic affected your understanding of your child's language development? This could include anything you have learned or observed about your child's language (speaking and listening) skills during the pandemic.

5. How has the Covid-19 pandemic affected your understanding of your children's literacy development? This could include anything you have learned or observed about your child's literacy (reading and spelling) skills during the pandemic.

6. Please briefly describe any additional concerns about your child's well-being related to the Covid-19 pandemic. This could include social and emotional health, physical health, development, or anything else you would like to share.

7. Please describe any other challenges you faced as a parent or caregiver during the Covid-19 pandemic. This could include social and emotional health, physical health, or anything else you would like to share.
Table 3

Descriptive statistics for oral language, word reading, and nonverbal cognition by group.

<table>
<thead>
<tr>
<th></th>
<th>DLD</th>
<th>TD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M (SD)</td>
<td>M (SD)</td>
</tr>
<tr>
<td>Oral Language</td>
<td>79.61 (4.83)***</td>
<td>100.83 (10.16)***</td>
</tr>
<tr>
<td>Nonverbal Cognition</td>
<td>95.35 (14.87)</td>
<td>105.36 (21.34)</td>
</tr>
<tr>
<td>Word Reading</td>
<td>84.11 (12.51)***</td>
<td>99.92 (8.76)***</td>
</tr>
</tbody>
</table>


Table 4

Categories and subcategories for both groups.

<table>
<thead>
<tr>
<th>Categories</th>
<th>Subcategories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 1- Impacts on Children</td>
<td>Child language not affected</td>
</tr>
<tr>
<td></td>
<td>Child literacy not affected</td>
</tr>
<tr>
<td></td>
<td>Negative impacts on child well-being</td>
</tr>
<tr>
<td></td>
<td>Negative impact on literacy</td>
</tr>
<tr>
<td></td>
<td>Negative impact on speech or language</td>
</tr>
<tr>
<td></td>
<td>Negative impact on education</td>
</tr>
<tr>
<td></td>
<td>Positive impact on the child</td>
</tr>
<tr>
<td>Category 2- Remote Learning Challenges</td>
<td>Remote learning challenges, children</td>
</tr>
<tr>
<td></td>
<td>Remote learning challenges, caregivers</td>
</tr>
<tr>
<td>Category 3- Impacts on Caregivers</td>
<td>Caregiver learning</td>
</tr>
<tr>
<td></td>
<td>Negative impact on caregiver well-being</td>
</tr>
<tr>
<td>Category 4- Protective Factors</td>
<td>Child level protective factors</td>
</tr>
<tr>
<td></td>
<td>Environment level protective factors</td>
</tr>
</tbody>
</table>
Counts, percentages, and example quotes by group (DLD, \(n = 23\) and TD, \(n = 22\)) for each of the seven subcategories within the Impacts on Children category.

<table>
<thead>
<tr>
<th>Subcategory</th>
<th>DLD, 10 (43.48%)</th>
<th>TD, 14 (63.64%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child language not affected</td>
<td>“Honestly I don't think that has been affected. He has been able to communicate with others and listen.” (Participant 4 DLD)</td>
<td>“I wouldn't say that it hindered it because he did really well in terms of following directions on the tablet.” (Participant 21 TD)</td>
</tr>
<tr>
<td></td>
<td>“I don't think it has affected him that way.” (Participant 24 DLD)</td>
<td>“I don't feel it has affected her language development.” (Participant 18 TD)</td>
</tr>
<tr>
<td>Child literacy not affected</td>
<td>“Not affected. On track.” (Participant 21 DLD)</td>
<td>“It hasn't. We are fortunate to have many books and prioritize literacy. This combined with excellent teachers has helped him stay on track.” (Participant 6 TD)</td>
</tr>
<tr>
<td></td>
<td>“I think since we are very proactive with reading at home- Our child continued to excel in reading skills despite the pandemic.” (Participant 1 DLD)</td>
<td>“My child had lots of practice with this and I don’t see him as being affected by the pandemic in these areas.” (Participant 15 TD)</td>
</tr>
<tr>
<td>Negative impacts on child well-being</td>
<td>“My daughter seemed depressed, she ate a lot more, gained weight and while she was at the YMCA doing her remote learning she seemed stressed. I believe she would take it out on other kids at times. She stated that she hated math and was no good at it. She would cry and say she hated remote learning, she would be stuck doing assignments on Fridays without the teacher and had no idea what she was doing, so she would cry when Friday would come. She missed her friends and teachers and she didn't feel ready to go to the second grade. I hope she never has to go through that again.” (Participant 9 DLD)</td>
<td>“Being in large groups of students is hard for (her), socializing was limited during COVID, so it's tough getting kiddos to focus, not to play with/distract each other, and stay on task.” (Participant 5 TD)</td>
</tr>
<tr>
<td></td>
<td>“I was trying to get him a therapist to talk to about some anger issues I saw seeing but everywhere had/has a wait list due to COVID-19. I am still waiting to hear and he's been on a list for 6 months now.” (Participant 22 TD)</td>
<td></td>
</tr>
</tbody>
</table>
“Social and emotional health have drastically been affected because they are told they are being "unsafe" to peers when giving them a hug.” (Participant 2 DLD)

<table>
<thead>
<tr>
<th>Negative impact on literacy</th>
<th>DLD, 16 (69.57%)</th>
<th>TD, 9 (40.91%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Ugh, he is so behind on all of this. He still has a hard time identifying all letters, can't pronounce certain sounds, reading is very behind, spelling is terrible and writing is horrendous.” (Participant 23 DLD)</td>
<td>“She had fallen behind in her reading.” (Participant 1 TD)</td>
<td></td>
</tr>
<tr>
<td>“My son’s reading skills were greatly affected, he had trouble with sounds and spelling of words.” (Participant 20 DLD)</td>
<td>“Writing: she missed the opportunity to learn to write in school. i.e., with &quot;air/land/sea line&quot; where they learn capital, lowercase etc. So her writing (penmanship) is not great.” (Participant 8 TD)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Negative impact on speech or language</th>
<th>DLD, 7 (30.43%)</th>
<th>TD, 1 (4.55%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Covid affected his speech skills he has hard time saying big words like hospital.” (Participant 19 DLD)</td>
<td>“I have been told he doesn't follow directions at school on work he is given. This is also true at home when completing homework.” (Participant 15 TD)</td>
<td></td>
</tr>
<tr>
<td>“Speech is very far behind his age level.” (Participant 11 DLD)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Negative impact on education</th>
<th>DLD, 8 (34.78%)</th>
<th>TD, 4 (18.18%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>“In general, I feel like my child is more behind the grade level due to covid and having to review past concepts.” (Participant 1 DLD)</td>
<td>“I feel the covid pandemic affected my child's education in the aspect of behavior and focus. He has a harder time staying on task and often talks or doesn't follow directions as he used to before.” (Participant 15 TD)</td>
<td></td>
</tr>
<tr>
<td>“Severely. Constantly having to self-quarantine due to close contact cases. Being taken out of school because of that.” (Participant 2 DLD)</td>
<td>“It seemed like she didn't learn anything new. Her class was still counting to 5 when she was tested and scored at the 4th month of second grade for math.” (Participant 20 TD)</td>
<td></td>
</tr>
</tbody>
</table>

| Positive impact on the child | DLD, 3 (13.04%) | TD, 5 (22.73%) |
“He received a lot of one-on-one time with his special education teachers which gave him more confidence.” (Participant 7 DLD)

“(He) has learned to focus more. He reads better and more fluently.” (Participant 21 DLD)

“We continued with teaching him, reading with him and helping him as best we could. He received extra speech services so he really focused on his speech and working to be conscious of mistakes and correcting them. He also is much better at following directions.” (Participant 13 TD)

“She has been given more freedom to explore music, topics and creativity in areas of interest to her. Her language has expanded and matured. She has been able to develop complex concepts and has a great ability to express them.” (Participant 17 TD)

Note. Counts refer to the told number of caregivers within each group who mentioned the respective subcategory. Subcategories were counted only once per participant.
Figure 1

Step 1: Independently identify key words and phrases from the responses and generate initial codes.

**Participant 24 DLD:** Dramatically. [He] struggles in general. He never should have gone to first grade. but MA has that thing no child left behind. This year was very difficult academically. He has been trying to learn to spell "we" all week and he still can't. This year there has still been no consistency in terms of teachers.

**Participant 11 TD:** Yes, reading & writing level has dropped. Also, socialization w/ peers has been limited.

Step 2: Establish consensus on codes.

1-General concerns about education, 2-Spelling difficulty, 3-Reading difficulty, 4-Writing difficulty, 5- Concerns, lack of socialization

Step 3: Refine, collapse, and consolidate consensus codes and their definitions into subcategories.

1- Negative impact on education, 2, 3, 4-Negative impact on literacy, 5-Negative impact on child well-being

Step 4: Refine and collapse codes into categories.

1, 2, 3, 4, 5- Category 1: Impacts on children

Note. The top box indicates two participant’s responses to the open-ended question, “How has the COVID-19 pandemic affected your child’s education?” Category 1 also included the following subcategories: This category also included the additional subcategories of child language not affected, child literacy not affected, negative impact on speech or language, and positive impact on the child
Figure 2

Frequency of caregiver mention of subcategories, in percentages, by group.
Appendix

Positionality Statement: Katharine M. Radville, MS, CCC-SLP

Katharine is currently a doctoral research fellow whose research is primarily conducted in collaboration with a large, urban school district and focuses on elementary-school children with developmental language disorder and dyslexia and their families. She is also a speech-language pathologist, literacy specialist, and a former general education, public-school teacher. Katharine’s research is informed by her experiences as a clinician and educator, and by her expertise in both oral and written language. She is also a parent of two, elementary-school children. In addition to her commitment to advocacy for children with language and literacy difficulty, her experiences as a parent during the COVID-19 pandemic also motivated her to pursue this research study. When this study was conceptualized, Katharine was her children’s primary educator, having elected to home school them for the 2020-2021 academic year. As a coder for this study, Katharine was as deliberate as possible to consider diverse viewpoints and to ensure that her own, related experiences did not interfere with her interpretation of caregivers’ responses.

Positionality Statement: KaRynn Sheranian, MS, CCC-SLP

KaRynn is doctoral research fellow who focuses on the implementation of evidence-based literacy and language interventions and assessments within education. Her research endeavors are deeply rooted in ensuring that every child has the opportunity to communicate effectively and read proficiently. While she has not previously conducted research in this specific area, she approaches this work with an eagerness to contribute to the body of knowledge in this critical domain. Her interest in this study was fueled by her own professional experiences as a school-based speech-language pathologist during COVID-19 school closures. These experiences exposed her to the multifaceted challenges that students, families, and educators faced. It is important to acknowledge that she is not a parent, and did not directly experience the COVID-19 school closures from a parental perspective. Additionally, she has not personally encountered the challenges of parenting a child with language or reading difficulties. She recognizes that her clinical experiences during COVID-19 school closures may influence her perspective and the lens through which she approaches this research. However, KaRynn is committed to conducting this study with rigor and reflexivity to ensure that her insights are informed by a deep understanding of the complexities involved. She strives to maintain objectivity and diligently consider potential biases. KaRynn is committed to upholding the highest standards of ethical conduct, methodological rigor, and contributing to equitable education opportunities for all children.